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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/733,638

12/12/2003

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EXAMINER

RAHIM, MONJUR

ART UNIT

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2134

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/733,638	Applicant(s) BOUCHAT ET AL.	
	Examiner MONJOUR RAHIM	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 02/293,284.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/13/2004; 12/12/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. ***Claims 1-12*** are pending.
2. ***Claims 1-12*** are rejected.
3. ***Pre-amendment*** has been considered.

Information Disclosure Statement

4. The Information Disclosure Statement (IDS) submitted on 12/12/2003 and 04/13/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the IDS statement is being considered by the examiner.

Priority

5. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 02293184 (EPO), filed on 12/20/2002.

Drawings

6. The drawings filed on 12/12/2003 are accepted by the examiner.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc, but not the copy of a claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Medvinsky et al. (US Pub No. 2001/0047484 A1), hereinafter Medvinsky.

As per ***claim 1***, Medvinsky discloses:

- **generating by said user equipment (EQUIP) a credential (C(P-U2; XID21) based upon a user password (P-U2) being associated to said user (U2) and a session parameter (XID21) being determined by said user equipment (EQUIP) for said session which is actual being established** (Medvinsky, Abstract, “A method for an uninitialized client to obtain credentials from a server which are then used to provide authenticated exchange for network configuration parameter assignment. The obtained credentials can be applied to an authentication option when a dynamic host configuration protocol (DHCP) is being used for address assignment”), where “client” is the user, inherently user’s equipment, as claimed;

- **comprising in a session message (DISCOVER(USER2; Xff)21; C(P-U2; XID21))) of said protocol (DHCP) a user identification (USER2) that uniquely identifies said user (U2), said session parameter (XID21) and said generated credential (C(P-U2; XID21))** (Medvinsky, paragraph [0011], “A "Key Distribution Center" ("KDC") is a network service that supplies tickets and temporary session keys; or an instance of that service or the host on which it runs. The KDC services both initial ticket and ticket-granting ticket (TGT) requests. The initial ticket portion is sometimes referred to as "authentication server" (or "authentication service"). The ticket-granting ticket portion is sometimes referred to as the ticket-granting server (or "ticket granting service")");

-**forwarding said session message (DISCOVER (USER2; XID21; C(P-U2; XID21))) by said user equipment (EQUIP) to said authentication device (AUTH)** (Medvinsky,

paragraph [0012], “DHCP” defines the protocol exchanges for a client to obtain its IP address and network configuration information from a DHCP Server. Kerberos V5 defines the protocol and message exchanges to mutually authenticate two parties”);

- upon reception by said authentication device (AUTH) of said session message (DISCOVER(USER2; XID21; C(P-U2; XID21))) verifying said received credential (C(P-U2; XID21)) with a generated verification credential (VC(P-U2; XID21)) based upon said received session parameter (XID21) and said user password (P-U2) being associated to said received user identification (USER2) and thereby providing said authentication for said user (U2) (Medvinsky, paragraph [0096], " AP_REQ contains the Kerberos ticket for the DHCP server and also contains information needed by the DHCP server to authenticate the client. After verifying the AP_REQ and decrypting the Kerberos ticket, the DHCP server is able to extract a session key which it now shares with the DHCP client”).

As per *claim 2*, claim 1 is incorporated and Medvinsky discloses:

It is inherent that user’s account/profile must be in the authentication server in order to provide authentication based on rules.

As per *claim 3* claim 1 is incorporated and Medvinsky discloses:

-The method to provide an authentication for a user (U2) according to claim 1, characterized in that said protocol (DHCP) is a Dynamic Host Configuration Protocol (Medvinsky, Abstract, A method for an uninitialized client to obtain credentials from a server which are then used to provide authenticated exchange for network configuration parameter assignment. The obtained credentials can be applied to an authentication option when a dynamic host configuration protocol DHCP is being used for address assignment”).

As per *claim 4*, claim 1 is incorporated and Medvinsky discloses:

- (original): The method to provide an authentication for a user (U2) according to claim 1, characterized in that said session message (DISCOVER(USER2; XID21; C(P-U2; XID21))) is a Discover message of a Dynamic Host Configuration Protocol (Medvinsky,

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paragraph [0010], “A “DHCP” client” is an internet host using DHCP to obtain configuration parameters such as a network address. A “DHCP server” is an internet host that returns configuration parameters to DHCP clients. A “ticket” is a Kerberos term for a record that helps a client authenticate itself to a server. A ticket contains the client's identity; a session key, a timestamp, and other information, all sealed using the server's secret key. A ticket serves to authenticate a client when presented along with a fresh authenticator”), where “session key”, “timestamp” are the parameter in the session (message”).

As per *claim 5*, claim 4 is incorporated and Medvinsky discloses:

- **The method to provide an authentication for a user (U2) according to claim 4, characterized in that said user identification (USER2), said session parameter (XID21) and said generated credential (C(P-U2; XID21)) being included as a predefined Option in an Option field of said Discover message** (Medvinsky, paragraph [0015], “Kerberos is a secure key management mechanism that is based on a trusted 3.sup.rd party, the KDC. In Kerberos a client performs mutual authentication with the KDC and in the process obtains credentials (e.g., a Kerberos ticket) that it needs for authentication to an application server (e.g., the DHCP server). The client can then use the Kerberos ticket to perform mutual authentication with the DHCP server and to establish a shared session key that would be used for subsequent message authentication”).

As per *claim 6*, claim 1 is incorporated and Medvinsky discloses:

- **The method to provide an authentication for a user (U2) according to claim 1 characterized in that said session parameter (XID21) is a session identifier that uniquely identifies said session that is actual being established** (Medvinsky, paragraph [0010], “A ticket contains the client's identity, a session key, a timestamp, and other information, all sealed using the server's secret key. A ticket serves to authenticate a client when presented along with a fresh authenticator”), where “session key” is the unique identifier of a session, as claimed.

As per *claim 7*, Medvinsky discloses:

- a first generator (GEN1) to generate a credential (C(P-U2; XID21)) based upon a user password (P-U2) being associated to said user (U2) and a session parameter (XID21) being determined by said user equipment (EQUIP) for said session which is actual being established (Medvinsky, paragraph [0010], "A ticket contains the client's identity, a session key, a timestamp, and other information, all sealed using the server's secret key. A ticket serves to authenticate a client when presented along with a fresh authenticator"), where "ticket" is the credential, which is generated to function uniqueness of authenticity, as claimed.

- a second generator (GEN2) to comprise in a session message (DISCOVER(USER2; XID21; C(P-U2; XID21))) of said protocol (DHCP) a user identification (USER2) uniquely identifying said user (U2), said session parameter (XID21) and said generated credential (C(P-U2; XID21)) and to forward said session message (DISCOVER(USER2; XID21; C(P-U2; XID21))) to said authentication device (AUTH) in order to enable thereby said authentication device (AUTH), upon reception of said session message (DISCOVER(USER2; XID21; C(P-U2; XID21))) to verify said received credential (C(P-U2; XID21)) with a generated verification credential (VC(P-U2; XID21)) based upon said received session parameter (XID21) and said user password (P-U2) that is associated to said received user identification (USER2) and to provide thereby said authentication for said user (U2) (Medvinsky, paragraph [0020], "An authentication and parameter exchange sequence can be initiated by a DHCP-client broadcast or other appropriate Kerberos message. The proxy, which can be invisible to the client ... authentication and parameter assignment exchanges (e.g. including an IP address assignment) can be conducted in a largely conventional manner"), where "broadcasting session message" with session parameter to authenticate, as claimed.

As per *claim 8*, Medvinsky discloses:

- a third generator (GEN3) to generate a verification credential (VC(P-U2; XID21)) based upon a received session parameter (XID21) and based upon a user password (P-U2) that is associated to a received user identification (USER2), and to provide said verification credential (VC(P-U2; XID21)) to a verifier (VER) (Medvinsky, paragraph [0091], "The client, upon receiving a broadcast response having a link layer destination address as its hardware

address and a network layer address as the broadcast address, must verify that the hardware address in the ticket corresponds to its link layer address. Upon receiving a TGS_REP (or an AS_REP with the application server ticket) from the proxy, the client will have enough information to securely communicate with the application server (the DHCP-server in this case), as specified in the following section");

- **said verifier (VER) coupled to said third generator (GEN3) to verify said verification credential (VC(P-U2; XID21)) against a received credential (C(P-U2; XID21)) and to provide thereby said authentication for said user (U2)** (Medvinsky, paragraph [00502], "This can be initiated as shown by block 920 in which an authenticated first message from the client to the server is sent as part of the authenticated address assignment protocol. Thus, the server can utilize the credentials to authenticate this first message received from the client, as illustrated by block 924");

- **said received user identification (USER2), said received session parameter (XID21) and said received credential (C(P-U2; XID21)) being comprised by said user equipment (EQUIP) in a session message (DISCOVER(USER2; XID21; C(P-U2; XID21))) of said protocol (DHCP)** (Medvinsky, paragraph [0045], "As with system 100 of FIG. 1, the substantial decoupling present in system 200 (FIG. 2) enables the authentication phase to be conducted in a manner largely consistent with that of a conventional Kerberos key management exchange. That is, a client gets a ticket granting ticket ("TGT") by contacting an authentication server within a KDC using As Request and Reply messages (see FIG. 5). The client then contacts a Ticket Granting Server in a KDC to get a server ticket using TGS_REQ and TGS_REP messages (which ticket permits initiation of the parameter exchange phase). It is also possible for a client to obtain a DHCP server ticket directly with the AS Request/Reply exchange, and without the use of the TGT");

- **said credential (C(P-U2; XID21) being generated by said user equipment (EQUIP) based upon said user password (P-U2) that is uniquely associated to said user (U2) and said session parameter (XID21) that is determined by said user equipment (EQUIP) for said session which is actual being established** (Medvinsky, paragraph [0103], [0104], "The above examples could also be modified such that DHCPclients would not require any additional configuration

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information other than a password or a key (and a public key certificate if PKINIT is used. In the above examples, the Kerberos session key is used directly as an HMAC key to authenticate DHCP message. Standard security practice, however, is to use different keys for different purposes. Thus, the Kerberos session key is used to encrypt a part of an AP_REQ message”);

- **said session message (DISCOVER(USER2; XID21; C(P-U2; XID21))) being forwarded by said user equipment (EQUIP) to said authentication device (AUTH)** (Medvinsky, paragraph [0079], “The client sends TGS Request for a principal name `dhcprvr` with the realm found in the TGT to the proxy”).

As per **claim 9**, claim 8 is incorporated and Medvinsky discloses:

- **The authentication device (AUTH) according to claim 8, characterized in that said authentication device is at least partly included in a network access provider (NAP)** (Medvinsky, paragraph [0043], “Customized hardware might also be utilized and/or particular elements might be implemented in hardware, software (including so-called “portable software,” such as applets) or both. Further, while connection to other computing devices such as network input/output devices (not shown) may be employed, it is to be understood that wired, wireless, modem and/or other connection or connections to other computing devices might also be utilized”).

As per **claim 10**, claim 6 is incorporated and Medvinsky discloses:

- **Telecommunication network to provide an authentication for a user (U2), characterized in that said telecommunication network comprises a user equipment (EQUIP) according to claim** (Medvinsky, Abstract, “A method for an uninitialized client to obtain credentials from a server which are then used to provide authenticated exchange for network configuration parameter assignment. The obtained credentials can be applied to an authentication option when a dynamic host configuration protocol DHCP is being used for address assignment”), where computer network is capable of carry data, video and voice, as claimed.

As per **claim 9**, claim 8 is incorporated and Medvinsky discloses:

- **An authentication device (AUTH) according to claim 7**(Medvinsky, paragraph [0043], “Operating system utilization will also vary depending on the particular host devices and/or process types (e.g. computer, appliance, portable device, etc”).

As per **claim 9**, claim 8 is incorporated and Medvinsky discloses:

- **An authentication device (AUTH) according to claim 8** (Medvinsky, paragraph [0043], “Operating system utilization will also vary depending on the particular host devices and/or process types (e.g. computer, appliance, portable device, etc”).

Conclusion

9 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form “PTO-892 Notice of Reference Cited”).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monjour Rahim whose telephone number is (571)270-3890. The examiner can normally be reached on 5:30 AM -3:30 PM (Mo-Th).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chameli Das can be reached on (571)272-3696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair.direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

/Monjour Rahim/
Patent Examiner
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/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2134